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Application No.: 10/826,003

Docket No.: JCLA12118-R

AMENDMENTS

In The Claims:

Please amend the claims as follows:

Claims 1-6 (canceled)

7. (currently amended) A light-emitting diode package structure, comprising:

a semiconductor sub-mount having a first surface with a cavity therein and comprising a first conductive type semiconductor substrate and a second conductive type region enclosed by the first conductive type semiconductor substrate;

an insulating layer set up on the first conductive type semiconductor substrate;

a first patterned conductive-reflective film set up on a portion of the first surface, a first sidewall of the cavity and a bottom surface of the cavity, wherein the first patterned conductive-reflective film at least substantially directly covers the first sidewall of the cavity and directly covers a part of the first conductive type semiconductor substrate;

a second patterned conductive-reflective film set up on a portion of the first surface, a second sidewall of the cavity and a bottom surface of the cavity, wherein the second patterned conductive-reflective film at least substantially covers the second sidewall of the cavity and is separated from the first conductive type semiconductor substrate by the insulating layer;
and

a light-emitting diode chip set up inside the cavity of the semiconductor sub-mount, wherein the light-emitting diode has a first electrode and a second electrode electrically

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connected to the first patterned conductive-reflective film and the second patterned conductive-reflective film.

8. (original) The light-emitting diode package structure of claim 7, wherein the package further comprises a pair of bumps set up between the first electrode of the light-emitting diode and the first patterned conductive-reflective film as well as the second electrode of the light-emitting diode and the second patterned conductive-reflective film.

9. (original) The light-emitting diode package structure of claim 8, wherein material constituting the bumps comprises lead-tin, gold-tin alloy or gold.

10. (original) The light-emitting diode package structure of claim 7, wherein the package further comprises a first bonding pad and a second bonding pad set up on the first patterned conductive-reflective film and the second patterned conductive-reflective film for connecting electrically with an external circuit board.

11. (original) The light-emitting diode package structure of claim 7, wherein the sidewall and the bottom surface of the cavity form an obtuse angle.

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12. (currently amended) The light-emitting diode package structure of claim 7, wherein material constituting the semiconductor sub-mount comprises silicon, ~~or~~ gallium arsenide, ~~or~~ SiC, or zinc oxide.

Claim 13. (canceled)

14. (currently amended) The light-emitting diode package structure of claim 12, wherein the first conductive type semiconductor ~~sub-mount~~ substrate is an N-doped material layer and the second conductive type region is a P-doped material layer.

15. (currently amended) The light-emitting diode package structure of claim 12, wherein the first conductive type semiconductor ~~sub-mount~~ substrate is a P-doped material layer and the second conductive type region is an N-doped material layer.